

Purchasing Receipts

PO No	Supplier Item No	Line Ref No	Rel Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
P0040266	THY001-VC	1	1 Net 30	M17-4-H1150-R4.000	17.4 SS H1150 Round Bar 4.000" MATERIAL:17.4 PH CONDITION H1150 MATERIAL:17.4 PH / S 17400 TYPE 630 SS ROUND BAR GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD STRENGTH PER TABLE MINIMUM ULTIMATE STRENGTH PER TABLE SPECIFICATION: AMS 5633 OR ASTM A564				6	6/27/2018	6	S084786	Stock	6/27/2018	\$ 165.83 / ft	0	\$995.00	Thyssenkrupp Materials CA Ltd		
2				M6061T6B2.250X4.000	6061T6 Bar 2.250 X 4.000 : MATERIAL: 6061- T6/T6S1/T6S10/T6S11/T62 ALUMINUM BAR PER QQ-A-225B OR AMS-QQ-A-225B OR AMS 411714/128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12	12	S084787	Stock	6/27/2018	\$ 28.05 / ft	0	\$336.57	Thyssenkrupp Materials CA Ltd			
3				M6061T6B2.500X04.500	6061-T6 Bar 2.50 X 4.50 : MATERIAL: 6061- T6/T6S1/T6S10/T6S11/T62 ALUMINUM BAR PER QQ-A-225B OR AMS-QQ-A-225B OR AMS 411714/128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				6	6	S084788	Stock	6/27/2018	\$ 35.83 / ft	0	\$215.00	Thyssenkrupp Materials CA Ltd			
4				M6061T6B2.500X01.250	6061-T6 Bar 2.50 X 1.25 : MATERIAL: 6061- T6/T6S1/T6S10/T6S11/T62 ALUMINUM BAR PER QQ-A-225B OR AMS-QQ-A-225B OR AMS 411714/128/4115/4116 OR QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12	12	S084789	Stock	6/27/2018	\$ 9.74 / ft	0	\$116.87	Thyssenkrupp Materials CA Ltd			
																\$1,250.07				

Line	Job	Part	Supplier	Part No	Description	Status	Due Date	Received	Quantity	Balance	Unit Price (CAD)	Extended Price
PURCHASE ORDER												
3		M6061T6B2.500X04.500	: MATERIAL: 6061-T6	6061-T6 Bar 2.50 X 4.50	Firmed 6/27/18	6 ft	0 ft	6 ft	\$23.8434/ft	\$143.06		
4	A4	M6061T6B2.500X01.250	: MATERIAL: 6061-T6	T6/T651/T6510/T6511/T62 ALUMINUM BAR PER	Firmed 6/27/18	12 ft	0 ft	12 ft	\$9.7391666/ft	\$116.87		
5		M17-A-B1.250X2.000	: MATERIAL: 17-A PH SS	5604/5643 GRAIN MUST BAR AS PER AMS	Firmed 7/9/18	24 ft	0 ft	24 ft	\$46.20/ft	\$1,108.80		
Grand Total: \$2,700.30												

Pex 6/20/18 11:44 AM date/time/charla

Procurement Quality Clauses	A005 right of entry	A012 chemical and physical test report	A016 personnel qualification	A017 raw material identification (as applicable)	A026 certification of material conformance	A041 quality management system	A042 part notification by supplier	A043 retention of quality documents	www.datadepot-space.com for further explanation.
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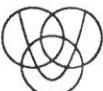
Order Notes

Mr

Jc

DELIVERY NOTE

thyssenkrupp



DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7

DATE: 06/27/2018
DOC. NO: 2406052923*
BOL. NO: 2406052923
ORDER NO: 1403692528
YOUR P/O: P0040266
CUSTOMER NO: 10058125
ROUTE: 303UA
CONTACT: Lucy Truglio
TEL: Lucy Truglio
FAX: Lucy Truglio
EMAIL: lucy.truglio@thyssenkrupp.co

MTR

WITH TEST REPORTS, PACKING SLIPS ARE TO SENT
TO SHIPPING.
ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCE ON IT **

ITEM DESCRIPTON: H1150
0010 CONDITIION: H1150
GRAIN MUST BE ALONG LENGTH OF BAR
AM 5643 OR ASTM A564
1 PC
261 lb
SSR00764
UT
Cut To Length
4.0000 " (+.0625-0) X 72 RBW Cutting - Standard + .125
T-17-4 Stainless Steel H1150 Double Heat Treat HRAP Round
72.0300 " 1
Actual Chemistry/Act. Physical
Standard Packaging

CONDITIION: H1150
GRAIN MUST BE ALONG LENGTH OF BAR
AM 5643 OR ASTM A564
1 PC
261 lb
SSR00764
UT
Cut To Length
4.0000 " (+.0625-0) X 72 RBW Cutting - Standard + .125
T-17-4 Stainless Steel H1150 Double Heat Treat HRAP Round
72.0300 " 1
Actual Chemistry/Act. Physical
Standard Packaging

AM 5643 OR ASTM A564
1 PC
263.000 lb
Total Gross Weight
All items, not declared as partial delivery, are final quantities.
Delivery Terms: PPD gem. Incoterms 2000 Prepaid PREPAID
SAE AMS 5643/U;ROHS COMPLIANT;ASTM A 564/A 564M|2013
1013988781 1 PC VALBRUNA 0000265556 259563
TAGNUM QTY UOMVEND VENDPO HLOT
PCS --- COM

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurent, QC H4S 1A7

DELIVERY NOTE

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7

DATE: 06/27/2018
DOC. NO: 2406052923*
BOL. NO: 2406052923*
ORDER NO: 1403692528
YOUR P/O: P0040266
CUSTOMEER NO: 10058125
ROUTE: 303UA
CONTACT: Lucy Truglio
TEL:
FAX:
EMAIL: lucy.truglio@thyssenkrupp.co

*thyssenkrupp Materials NA certifie que le matériel décrit ci-dessus est conforme aux dessins ou spécifications exigés sur le bon de commande qui sont en vigueur à la date où la commande a été acceptée. thyssenkrupp Materials NA certifies that the material described above is in accordance with the drawings or specifications called for on said order that are current on the date order was accepted.

*Nous certifions que le document reproduit ici est une copie conforme du rapport fourni par le fournisseur du matériel où les données résultent de l'analyse faite par un laboratoire qualifié. Nous certifions que le document reproduced here is true to the report provided by the equipment supplier where the data are the result of analysis by a qualified laboratory.

David Noodine - Director of Quality Assurance



Written approval of Accu-Test Labs LLC.

Our reports are for the exclusive use of our customer and our name may be used only with prior written approval. Our reports apply only to the sample tested or inspeced and do not necessarily represent the quality of other apparently similar or different materials. All test specimens and testing conforms to ASTM A-370 unless otherwise stated. This test report shall not be reproduced, except in full, without the written approval of Accu-Test Labs LLC.

Document Reviewer Stephen Velez

Documentation Specialist

Reviewed By:

Unless otherwise stated, yield stress is 0.2% offset, gauge length is 2 in. for 1/2 in. bars or 1 in. for 1/4 in. bars.

No./Location	Size	Area (in²)	Ult. Load (lbs.)	Yield (in²)	Tensile (psi)	Elong (%)	R. of A.	Fracutre
	.502	114,000	138,800	22.4	62.4			

Tensile Test Results

Job Info:

Heat/LID: 269563 Tag: 1007207051

Material: T74-H1150 Double Heat HRAF 4"OD X 6"Long Test Piece

PO: 5520120553-37A

Ordered By: Kari Buchala

Southfield, MI 48086-5116

P.O. Box 5116

Rev: A

Copper & Brass Sales Division

To: ThyssenKrupp Materials NA Report No: 776378.00

Report Date: 3/10/2017

Cust Acct: THY086

Rev: A

Copper & Brass Sales Division

P.O. Box 5116

Report No: 776378.00

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SPECIFICATION CONTROL DRAWING

8

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6

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1



PURCHASE MATERIAL 17-4 PH / S17400 / TYPE 630 SS ROUND BAR
GRAIN MUST BE ALONG LENGTH OF BAR
MINIMUM YIELD STRENGTH PER TABLE
MINIMUM ULTIMATE STRENGTH PER TABLE



SPECIFICATION:
PART NUMBER:
M17-4-HHHHH-R X.XXX | WHERE: HHHHH SPECIFIES THE MATERIAL CONDITION (PER TABLE BELOW)
COND | O.D.



MATERIAL CONDITION TABLE:

CODE	CONDITION	MIN YIELD TENSILE STRENGTH (KSI)	MIN ULTIMATE TENSILE STRENGTH (KSI)
(OMITTED)	(NONE SPECIFIED CONDITION A NOT ACCEPTABLE)	100	150
H900	H900	170	190
H925	H925	155	170
H1025	H1025	145	155
H1075	H1075	125	145
H1100	H1100	115	140
H1150	H1150	105	135
COND A	(CONDITION A (SOLUTION TREATED)		

NOTES: MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR TENSION OR SHEAR APPLICATIONS IN COLD WEATHER CONDITIONS

MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR APPLICATIONS WHERE STRESS CORROSION CRACKING IS POSSIBLE CONDITION A NOT TO BE USED IN DESIGN FOR FINAL PRODUCT AND SHOULD ALWAYS BE HEAT TREATED



EXAMPLES:

PART NUMBER	M17-4-R4000
4.000" DIAMETER BAR MIN UTS = 150 KSI MIN YTS = 100 KSI	
2.500" DIAMETER BAR H900 CONDITION	M17-4-H900-R2500
3.250" DIAMETER BAR H1025 CONDITION	M17-4-H1025-R3250
0.750" DIAMETER BAR A CONDITION	M17-4-COND A-R0750

A

B

C

D

RELEASED
2017-10-31
BY

APPROVED

DESIGN	NO	DART AEROSPACE LTD	
DRAWN	NO	HAWKESBURY, ONTARIO, CANADA	
CHECKED	CP	DRAWING NO.	
MFG. APPR.	RA	M17-4-R	REV. C
APPROVED	WM	TITLE	SHEET 1 OF 1
DE APPR.	CP	17-4 SS ROUND BAR	SCALE
DATE	17.09.14	NTS	

3

2

1

17-4 SS ROUND BAR

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Not for release outside the company or to unauthorized persons.

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC 18 INSPECTION		ENGINEERING SIGN OFF (if required)
INSPECTED BY:	SIGNED OFF BY:	DATE: 18/06/27
		8 98 DS

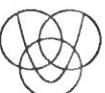
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
HRC	HRB	DUR A	DUR D	WEBSTER	
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

TESTERS LOCATED IN THE QUALITY OFFICE

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER DRAWING	<input checked="" type="checkbox"/>	AMS 3643
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.		

MATERIAL CERT REC'D:	18/06/21	DATE:
THICKNESS ORDERED:	4.000"	QUANTITY RECEIVED:
THICKNESS RECEIVED:	4.000"	QUANTITY INSPECTED:
SHEET SIZE ORDERED:	—	—
SHEET SIZE RECEIVED:	—	—
QTY RECEIVED:	654	QTY REJECTED:
PO / BATCH NO.:	M17-A-H1150-A4.m	MATERIAL:
PO / BATCH NO.: M17-A-H1150-A4.m		

thyssenkrupp



DELIVERY NOTE

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurent, QC H4S 1A7

thyssenkrupp Materials NA

Jc

DART AEROSPACE LTD
1270 ABERDEEN ST

HAWKESBURY ON K6A 1K7

DATE: 06/27/2018

DOC. NO: 2406057366*

BOL. NO: 2406057366

ORDER NO: 1403692528

YOUR P/O: P0040266

CUSTOMER NO: 10058125

ROUTE: 303UA

CONTACT: Lucy Truglio

TEL:

FAX:

EMAIL:

LUCY.TRUGLIO@THYSSENKRUPP.CO

WITH TEST REPORTS, PACKING SLIPS ARE TO SENT
TO SHIPPINGS.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

MTR

DELIVERIES ARE CARRIED OUT FOR YOUR ACCOUNT AND RISK ACC. TO OUR GEN. TERMS & COND. OF DELIVERY AND PAYMENT.

ITEM DESCRIPTION 0010 AMS-QQ-A-225/8, AMS-4160, ASTM B211
NET QTY1 / QTY2 PACKAG
1 1008750487

PC

ALRE00025

6061

T6511

2.25000

(+-0.024)

X 4.0000

(+-0.034)

X 144 Mill Length

Nominal Chemistry/Act Physical

Standard Packaging

AMS-QQ-A-225/8, AMS-4160, ASTM B211

1

PCS

UOM/END

QTY

TAGNUM

2001379154

1

PC SERVICE C

5400398986

20180733

ROHS COMPLIANT,ASTM B 221 | 2014

1

COM

HI01

1

All items, not declared as partial delivery, are final quantities.
Delivery Terms: FPD gsm. Incoterms 2000 Prepaid PREPAID

David Nordin - Director of Quality Assurance

supplier where the data are the result of analysis by a qualified laboratory.

* This document certifies that the material described below is in accordance with the drawings or specifications called for on said order that are current on the date of order.

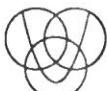
CERTIFICATE OF COMPLIANCE/CERTIFICATE DE CONFORMITÉ

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7
DATE: 06/27/2018
DOC. NO: 2406057366*
BOL. NO: 2406057366
ORDER NO: 1403692528
YOUR P/O: P0040266
CUSTOMER NO: 10058125
ROUTE: 303UA
CONTACT: Lucy Truglio
TEL: Lucy Truglio
FAX:
EMAIL: lucy.truglio@th

DELIVERY NOTE

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurier, QC H4S 1A7

thyssenkrupp



thyssenkrupp Materials NA

Service Center Metals

5850 Quality Way
Prince George, VA 23875

Can Do.



CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS



OUR ORDER NUMBER
949765

ITEM
10

BILL TO	MANIFEST NUMBER	DATE NUMBER	DATE OF SHIPMENT	CERTIFICATION
Thyssenkrupp Materials NA	366568	MRB1807	5/8/2018	ASTM-B22-14 StencilCont
SHIP TO	CUSTOMER I/D	ALLOY /TEMPER	SALESPERSON	SPECIFICATION
ThyssenKrupp Materials NA-Concord, ON	5400398986	6061-T6511	D.Schroeder (Canada)	RoHS 2011/65/EU Compliant

Quantity Certified 1,150 lbs 9pcs CUSTOMER PART NUMBER ALREC00025

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. Items produced and certified as 6061-T6511 also meet the requirements of EC61-16.

All aluminum products supplied by Service Center Metals, LLC contain no functional mercury. Neither mercury nor its compounds are used in the manufacture of aluminum products at our facility. Furthermore, aluminum products supplied by Service Center Metals have not, to the best of our knowledge, contacted any source of mercury.

SCM is ISO 9001-2015 certified

This product is RoHS-2, REACH, and DFARS compliant.

Tests	Lot No.	Mechanical Properties		Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
		Al	Mg				
1	(201807337)	4/24/18	min 51.50	max 51.50	min 48.10	max 48.10	min 14.70
1	201808301	5/7/18	min 49.40	max 49.40	min 45.40	max 45.40	min 18.00

Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others	Total	Melt Source:
001J180417B	201807357	6061	0.74	0.36	0.31	0.10	0.90	0.11	0.07	0.03	97.38	0.05	0.15	United States of America
001M180428A	201803201	6061	0.73	0.38	0.31	0.11	0.88	0.11	0.06	0.03	97.38	0.05	0.15	United States of America

SCM products are melted and extruded in the USA

Print Date: 5/8/2018

Calvin J. Wiggins, Director of Quality & Technical Services

Rev 3/4/2018

From: TK Materials CA, Ltd.

Cust. DART AEROSPACE LTD

Wgt.: 129 LB

CSztr:

Date 06/26/2018

CSztr:

CSztr PO040266

CSztr P0040266

CSztr 06/26/2018

CSztr

CSztr

CSztr

CSztr

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC 18 INSPECTION		ENGINEERING SIGN OFF (if required)
INSPPECTED BY:	DAS 9-89	SIGNED OFF BY:
DATE: 18/06/27		

RECORD RESULTS BELOW					
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.	HR C	HR B	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL	SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING					

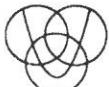
TESTERS LOCATED IN THE QUALITY OFFICE

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER DRAWING	<input checked="" type="checkbox"/>	AMS - 4160
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE CERT	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE SIGN OFF	<input checked="" type="checkbox"/>	
EXTENSION REPORT	<input checked="" type="checkbox"/>	

MATERIAL CERT REC'D:	<input checked="" type="checkbox"/>	DATE: 18/06/27	
THICKNESS RECEIVED:	2.25	QUANTITY RECEIVED:	1244
THICKNESS ORDERED:	2.25	QUANTITY INSPECTED:	1244
PO / BATCH NO.:	M606176B2-250x400	SHET SIZE RECEIVED:	—
MATERIAL:	M606176B2-250x400	SHET SIZE ORDERED:	—

DELIVERY NOTE

thyssenkrupp



thyssenkrupp Materials NA

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7

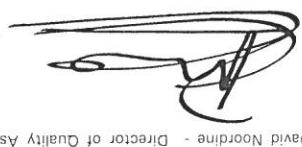


MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.
ATTN: CHANTAL/LINDA
** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCE ON IT **
Delivery's are carried out for your account and risk acc. to our Gen. Terms & Cond. of Delivery and Payment.
NET QTY1 / QTY2 PACKAG
0010 **AMIS-QQ-A-225/8** AMIS-4160, ASTM B211 OR ASTM
1008752812
1 PC
80
1b
ALRECO0215
6061 T6511 Aluminum Extruded Rectangular
2.50000 (+-.024) X 4.5000 (+-.034) X 72 RBW Cutting - Standard + .125
Cut To Length
72.000 " 1
Nominal Chemistry/Ac Physical
Standard Packaging
B221
AMIS-QQ-A-225/8, AMIS-4160, ASTM B211 OR ASTM
2.50000 (+-.024) X 4.5000 (+-.034) X 72 RBW Cutting - Standard + .125
Cut To Length
72.000 " 1
Nominal Chemistry/Ac Physical
Standard Packaging
TAGNUM QTY UOMVEND VENDPO HLOT PCS --- COM
1013991879 1 PC SERVICE C 5400390588 201802890
ROHS COMPLANT,ASTM B 221|2014

All items, not declared as partial delivery, are final quantities.
Delivery Terms: PPD geom. Incoterms 2000 Prepaid PREPAID

Total Gross Weight 84.000 lb

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurent, QC H4S 1A7



David Noodine - Director of Quality Assurance

*thyssenkrupp Materials NA certifie que le matériel décrit ci-dessus est conforme aux dessins ou spécifications exigées sur le bon de commande et qui sont en vigueur à la date où la commande a été acceptée. thyssenkrupp Materials NA certifie que le matériel décrit ci-dessus est conforme aux spécifications exigées sur le bon de commande accordance avec les drawings ou spécifications callé far on said order that are current on the date order was accepted.

*Nous certifions que le document reproduit ici est une copie conforme du rapport fourni par le fournisseur du matériel où les données résultent de l'analyse faite par un laboratoire qualifié. Nous certifions que le document reproduit ici est une copie conforme du rapport fourni par le fournisseur du matériel où les données résultent de l'analyse faite par un laboratoire qualifié. We certify that the document reproduced here is true to the report provided by the equipment supplier where the data are the result of analysis by a qualified laboratory.

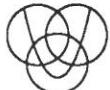
CERTIFICATE OF CONFORMITY/CERTIFICATE OF COMPLIANCE

DATE:	06/27/2018	DOC. NO:	2406053413*	BOL. NO:	2406053413	ORDER NO:	1403692528	YOUR P/O:	P0040266	CUSTOMER NO:	10058125	ROUTE:	303-A	CONTACT:	Lucy Truglio	TEL:		FAX:		E MAIL:	lucy.truglio@thyssenkrupp.co	m
HAWKESBURY ON K6A 1K7																						
1270 ABERDEEN ST																						
DART AEROSPACE LTD																						

DELIVERY NOTE

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurier, QC H4S 1A7

thyssenkrupp



thyssenkrupp Materials NA

Service Center Metals

5850 Quality Way
Prince George, VA 23875

Can Do.

**CERTIFIED INSPECTION REPORT AND TEST RESULTS
FOR EXTRUDED PRODUCTS**



Made In
the USA

MANIFEST NUMBER

361468

CUSTOMER PO

5400390588

CUSTOMER PART NUMBER

ALREC00215

BILL TO

ThyssenKrupp Materials NA

SHIP TO

ThyssenKrupp Materials NA-St Laurent, QC

Quantity Certified 1,121 lbs

7 pcs

DIE NUMBER

MRB0484

ALLOY / TEMPER

6061-T651

DESCRIPTION

MQRB 2.500x4.500

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. Items produced and certified as 6061-T651 also meet the requirements of 6061-T5.

All aluminum products supplied by Service Center Metals, LLC contain no functional mercury. Neither mercury nor its compounds are used in the manufacture of aluminum products at our facility. Furthermore, aluminum products supplied by Service Center Metals have not, to the best of our knowledge, contacted any source of mercury.

SCM is ISO 9001-2015 certified

Mechanical Properties

Tests

Lot No.

1 201802890

Test Date

2/18/18

Ultimate Tensile Strength (KSI)

min
50.20

Yield Strength (KSI)

max
50.20

min
47.00

max
47.00

CERTIFICATION

ASTM-B221-14 StencilCont

SPECIFICATION

AMS-QQA-200/8 Rev-A obsolete

SPECIFICATION

RoHS 2011/65/EU Compliant

DEI.: 2406053413
CSTOR P0040266

Date 06/26/2018

TK Materials CA, Ltd.

Wgt.: 80 LB
Cstmr:

Percent
Elongation

min
17.60

max
17.60

Others

Total

Each

AL

Each

Zn

Fe

Si

Cr

Mn

Mg

Others

Total

Melt Source:

United States of America

Chemical Composition for Aluminum Alloy 6061

Cast #

Lot No.

201802890

1

0.15

0.05

97.35

0.03

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SPECIFICATION CONTROL DRAWING

D

D

PURCHASE MATERIAL 6061-T6 / T651-T6510-T6511-T62 ALUMINUM BAR
 SPECIFICATION: QQA-225/8 OR AMS-QQA-225/8 (OR AMS 4117/4128/4115/4116)
 OR QQA-2008 OR AMS-QQA-2008 (OR AMS 4160)
 OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6B | T TTT | X | WW WWW

THICK | WIDTH

WHERE "TTT" = THICKNESS IN INCHES

"WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

C

C

B

B

RELEASED

JW

B	REMOVE QQA-250/11 OPTION. REFORMAT NOTES ADD	CP	09/07/13
A	NEW ISSUE	DS	01/06/08
REV. DATE			

DESIGN DRAWN	DS	DART AEROSPACE LTD		
CHECKED	JJS	HAWKESBURY	ONTARIO	CANADA
MFG. APPR.	JJS	DRAWING NO		REV. B
APPROVED	JJS	M6061T6B		SHEET 1 OF 1
DE APPR.		TITLE	SCALE	NTS
DATE	09/07/13	6061-T6 BAR	PROPRIETARY COPYRIGHT © 2001 BY DART AEROSPACE LTD NOT FOR DISTRIBUTION, COPIES OR COMMERCIAL USE. PLS. REPORT UNAUTHORIZED COPIES TO DART AEROSPACE LTD.	

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Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC 18 INSPECTION		ENGINEERING SIGN OFF (if required)
INSPECTED BY:	SIGNED OFF BY:	DATE: 18/06/27 9-89
DAS		

RECORD RESULTS BELOW						TESTERS LOCATED IN THE QUALITY OFFICE	
TYPE OF MATERIAL	SIZE OF TEST SAMPLE					HARDNESS / DUROMETER READING	
	HR C	HR B	DUR A	DUR D	WEBSTER		
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.							

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL PER DRAWING	Y (N) AMS-80-A-2258	
PHOTO REQUIRED	Y (N)	
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE CERT	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE SIGN OFF	Y (N)	
EXTRUSION REPORT	Y (N)	
DOES THIS REQUIRE AN ENGINEERING SIGN OFF	Y (N)	
SIZE OF TEST SAMPLE		
TYPE OF MATERIAL		

MATERIAL CERT REC'D:	2.50"	THICKNESS RECEIVED:	2.50"	QUANTITY RECEIVED:	6.44
MATERIAL CERT REC'D:	2.50"	THICKNESS ORDERED:	2.50"	QUANTITY ORDERED:	6.44
MATERIAL CERT REC'D:	2.50"	PO / BATCH NO.: 160617682500 X04500	MATERIAL:	DATE:	18/06/27
				QUANTITY INSPECTED:	6.44
				SHET SIZE RECEIVED:	—
				SHET SIZE ORDERED:	—
				QUANTITY REJECTED:	0
				SHEET SIZE RECEIVED:	—

DELIVERY NOTE

thyssenkrupp Materials NA, 4700 chemin du Bois-Franc, Saint-Laurent, QC H4S 1A7

thyssenkrupp Materials NA

thyssenkrupp Materials NA

thyssenkrupp Materials NA

thyssenkrupp Materials NA

1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7
DART AEROSPACE LTD
DATE: 06/27/2018
DOC. NO: 2406053584
BOL. NO: 2406053584
ORDER NO: 1403692528
YOUR PO: P0040266
CUSTOMER NO: 10058125
ROUTE: 303-A
CONTACT: Lucy Truglio
TEL: Lucy Truglio
FAX: Lucy Truglio
EMAIL: Lucy.truglio@thyssenkrupp.co
m
ATTN: CHANTAL/LINDA
** ALL PACKAGING SLIPS MUST HAVE THE HEAT NUMBER **
TO SHIPPING.
MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.
ATTN: CHANTAL/LINDA
** ALL PACKAGING SLIPS MUST HAVE THE HEAT NUMBER **
ITEM DESCRIPTION
0010 AMS-QQ-A-225/8 AMS-4160, ASTM B211 OR ASTM
1 PC
44
1b
ALRECO0316 6061 T6511 Aluminum Extruded Rectangular
1.25000 (+-.012) X 2.5000 (+-.024) X 144 Mill Length
Nominal Chemistry/Act Physical
Standard Packaging
B221
AMS-QQ-A-225/8,AMS-4160, ASTM B211 OR ASTM
TAGNUM QTY UOMVEND VENDPO HLOT PCS --- COM
2001379331 1 PC SERVICE C 5400400615 201807982 1
ROHS COMPLIANT,ASTM B 221 | 2014

All items, not declared as partial delivery, are final quantities.
Delivery Terms: PPD gsm. Incoterms 2000 Prepaid REPAID

52.000 lb

Total Gross Weight

David Nordin - Director of Quality Assurance

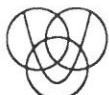
*thissenkrupp Material certifie que le matériau décrit ci-dessus est conforme aux dessins ou spécifications exigées sur le bon de commande et qui sont en vigueur à la date ou la commande a été acceptée. thissenkrupp Materials NA certifies that the material described above is in accordance with the drawings or specifications called for on said order that are current on the date order was accepted.

*Nous certifions que le document reproduit ici est une copie conforme du rapport fourni par le fournisseur du matériel où les données résultent de l'analyse faite par un laboratoire qualifié. Nous certifions que le résultat reproduit ici est vrai et que le rapport fourni par le fournisseur du matériel où les données résultent de l'analyse faite par un laboratoire qualifié.

CERTIFICATE OF CONFORMITY/CERTIFICATE OF COMPLIANCE

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON K6A 1K7
DATE: 06/27/2018
DOC. NO: 2406053584*
BOL. NO: 2406053584
ORDER NO: 1403692528
YOUR P/O: P0040266
CUSTOMER NO: 10058125
ROUTE: 303-A
CONTACT: Lucy Truglio
TEL: Lucy Truglio
FAX:
EMAIL: lucy.truglio@rthm

DELIVERY NOTE



Service Center Metals

5850 Quality Way
Prince George, VA 23875

Can Do.



CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS



OUR ORDER NUMBER	ITEM
950583	4

BILL TO	MANIFEST NUMBER	DIE NUMBER	DATE OF SHIPMENT	CERTIFICATION
ThyssenKrupp Materials NA	366563	MRB0475	5/8/2018	ASTM-B221-14 StencilCont
SHIP TO	CUSTOMER PO	ALLOY/TEMPER	SALESPERSON	SPECIFICATION
ThyssenKrupp Materials NA-St Laurent, QC	5400400615	(6061-T6511)	D.Schroeder (Canada)	RoHS 2011/65/EU Compliant

Quantity Certified 3,738 lbs 84 pcs

CUSTOMER PART NUMBER ALREC00316

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown. Items produced and certified as 5061-T6511 also meet the requirements of 6061-T6.

All aluminum products supplied by Service Center Metals, LLC contain no functional mercury. Neither mercury nor its compounds are used in the manufacture of aluminum products at our facility. Furthermore, aluminum products supplied by Service Center Metals have not, to the best of our knowledge, contacted any source of mercury.

SCM is ISO 9001-2015 certified

This product is RoHS-2, REACH, and DFARS compliant.

Mechanical Properties

Tests Lot No.
3 201807982

Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
5/6/18	min 48.30 max 50.10	min 43.90 max 46.20	min 14.80 max 16.90

Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others	Each	Total	Melt Source:
001E180323A	201807982	6061	0.75	0.37	0.32	0.11	0.90	0.11	0.06	0.03	97.35	0.05	0.15	United States of America	
001E180323Y	201807982	6061	0.76	0.37	0.33	0.12	0.97	0.10	0.05	0.03	97.27	0.05	0.15	United States of America	

SCM products are melted and extruded in the USA

Print Date: 5/8/2018

Calvin J. Wiggins, Director of Quality & Technical Services

Rev 3/14/2018

From: TK Materials CA, Ltd.
Cust.: DART AEROSPACE LTD
Cstmr: Cstmr
Date: 06/26/2018
Date: 06/26/2018
Cstmr: Cstmr
Wgt.: 44 LB

SPECIFICATION CONTROL DRAWING

D

PURCHASE MATERIAL 6061-T6/T651/T6510/T651N/T62 ALUMINUM BAR
 SPECIFICATION:
 QQ-A-2258 OR AMS-QQA-2258 (OR AMS 4117/4128/4115/4116)
 OR QQ-A-2008 OR ASTM-C707A-2008 (OR AMS 4160)
 OR ASTM B211 OR ASTM B221



PART NUMBER:

M6061T6B	T TTT	X	WW WWW
	THICK		WIDTH

WHERE "TTT" = THICKNESS IN INCHES

"WWWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

C

C

B

B

		REMOVED QQA-2258 OPTION REFORMAT NOTES AND		CP	09/07/13
A	REV	NEW ISSUE		DS	01/06/08
DESCRIPTION		BY DATE			
DESIGN	DS	DART AEROSPACE LTD			
DRAWN		HAWKESBURY ONTARIO CANADA			
CHECKED	JJS	DRAWING NO			
MFG. APPR.		M6061T6B			
APPROVED		TITLE			
DE APPR		6061-T6 BAR			
DATE	09/07/13	COPYRIGHT © 2001 BY DART AEROSPACE LTD			
		ALL INFORMATION CONTAINED HEREIN IS UNPUBLISHED PROPRIETARY INFORMATION OF DART AEROSPACE LTD. IT MAY NOT BE COPIED OR DISCLOSED WITHOUT THE EXPRESS WRITTEN CONSENT OF DART AEROSPACE LTD.			
		REV B			
		SHEET 1 OF 1			
		SCALE			
		NTS			

RELEASED
2009 -05-03
JW

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QC 18 INSPECTION		ENGINEERING SIGN OFF (if required)
INSPPECTED BY:	DAS 8	SIGNED OFF BY:
		DATE: 18/06/08 9-89

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRG	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					
Testers located in the Quality Office					

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER MDRAWING	<input checked="" type="checkbox"/>	AMS-QA-A-235/8
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS READING AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.		

MATERIAL CERT REC'D:	125	QUANTITY RECEIVED:	125
THICKNESS ORDERED:	2.500"	THICKNESS RECEIVED:	2.500"
PO / BATCH NO.:	M606176250x01250	DATE:	18/06/08

MATERIAL: M606176250x01250
PO / BATCH NO.: 100402665084789

MATERIAL RECEIPT INSPECTION FORM